

REPORT  
ON THE  
HEALTH  
OF THE  
BOROUGH OF SUTTON COLDFIELD,  
FOR THE YEAR 1893,

BY

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MEDICAL OFFICER OF HEALTH.

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BOROUGH OF SUTTON COLDFIELD,  
MEDICAL OFFICER OF HEALTH'S OFFICE,

*January 16th, 1894.*

*To the Health and Highways Committee.*

MR. CHAIRMAN AND GENTLEMEN,

I have the honour to present to you my EIGHTH ANNUAL REPORT on the Sanitary condition of the Borough, and in order to render comparison with previous Reports as easy as possible, I shall adopt the same general arrangement and tabular forms.

AREA.

This is the same as last year, viz., 13,030 acres; and as there has been no alteration in Ward boundaries, the area is sub-divided as follows:—Boldmere Ward, 1,051 acres; Hill, 2,907; Maney, 848; Trinity, 3,223; Walmley, 4,242; Wylde Green, 759.

POPULATION.

In non-census years, in a town like Sutton the estimation of the population is always a difficult matter, and as the accuracy of all rates depends on the correctness or otherwise of the estimate of the number of people living it is very desirable to obtain this as nearly as possible. Between 1881 and 1891 the population increased ten per cent., but if we were to adopt the same rate of increase at the present time, there would I think be little doubt that the population would be understated.

I come to this opinion, because the number of new houses of late years has largely increased, particularly in Boldmere and Maney Wards. I have obtained from the Borough Accountant the number of inhabited houses in the middle of the year, and as a result of this, and one or two other considerations I need not trouble you with, I estimate the population in the middle of 1893 to have been 9,100.

The following table shows the population divided among the six Wards :—

WARDS.	Area in Acres.	Population.
Boldmere Ward ... ..	1,051	1,542
Hill Ward ... ..	2,907	1,506
Maney Ward ... ..	848	2,089
Trinity Ward ... ..	3,223	1,648
Walmley Ward ... ..	4,242	1,037
Wylde Green Ward ... ..	759	1,278
	13,030	9,100

#### BIRTHS.

221 births have been registered during the year—128 males and 93 females. This is 31 more than last year. Calculated on the estimated population the birth-rate is 24·28 per 1,000, as compared with 21·22 for last year. This is considerably below the average of the country at large, and of the other towns and districts in the County of Warwick; the rate in which for 1892 (the last year for which statistics are as yet available) was 28·72.

Eight births were registered as illegitimate, compared with four in 1892 and three in 1891.

#### DEATHS.

During the year 138 deaths—68 males and 70 females—have been registered in the Borough, compared with 119 in 1892 and 159 in 1891. None of the deaths registered occurred in persons not belonging to the Borough, while five deaths occurred in Aston Workhouse, in paupers removed from the town; so that the result of correcting the mortality table is to add five deaths to the total number registered as occurring in the Borough. According to the estimated population the death-rate is 15·7 per 1000, compared with 13·4 last year. This, though a trifle higher than 1892, is lower than in 1891, when Influenza was so fatal, and may be considered perfectly satisfactory. The increase over 1892 is due to two causes—the epidemic of measles in the first quarter and an attack of epidemic influenza in the last, both of which at present are little amenable to Sanitary effort.

The following table shows the Birth, Death, and Zymotic Rates for the past ten years :—

	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.
Birth-Rate .....	26·80	24·60	23·06	24·09	23·34	23·07	21·27	25·25	21·22	24·28
Death-Rate .....	15·00	12·30	12·63	14·88	10·78	11·31	11·94	18·60	13·4	15·7
ZymoticDeathRate	1·30	0·70	1·04	2·95	1·11	0·87	0·73	2·59	0·22	2·19

In the following table are shown the Birth, Death, and Zymotic Rates for the separate Wards of the Borough :—



WARDS.	Population.	Birth Rate.	Death Rate.	Zymotic Death Rate.
Boldmere .....	1,542	18·15	13·61	1·94
Hill .....	1,506	29·21	19·92	3·98
Maney.....	2,089	28·72	15·31	3·82
Trinity .....	1,648	21·84	17·59	1·82
Walmley.....	1,037	28·92	17·35	—
Wylde Green .....	1,278	17·98	6·26	—

From this table it will be noted that both the general and Zymotic death-rates are highest in Hill Ward, and this result was obtained owing to mortality from Measles and diseases of the Respiratory Organs. Wylde Green Ward had the lowest general death-rate, as it had in the previous year, while its Zymotic rate was again nil. In Walmley too, the Zymotic rate was nil, though the general death-rate was somewhat higher than in 1892.

Of the 138 deaths 29 were in children under one year of age, and 19 in children under five, as compared with 25 and 8 respectively in the previous year.

The following table shows at a glance the rates of Infant mortality:—

Annual Rate of Mortality.	Percentage of Deaths of Infants under One Year to Total Deaths.	Percentage of Deaths of Children under Five Years to Total Deaths.	Percentage of Deaths of Infants under One Year to Registered Births.
15·7	21·0	34·7	13·1

These figures show almost identically the same infantile death-rate as in the previous year, and may be considered fairly satisfactory, as, taking the percentage of deaths of Infants under one year to registered births, we find the figure compares favourably with that of the Urban Sanitary Districts of the County of Warwick in 1892, which was 14·2. The figures for 1893 are not yet available. The following are the causes of infantile deaths registered:—Tabes Mesenterica, 4; Premature Birth, 3; Convulsions, 3; Pneumonia, 3; Teething, 3; Whooping Cough, 2; Atrophy, 2; Bronchitis, 2; Diarrhœa, 2; Debility, 2; Tubercular Meningitis, 2; and Enteritis, 1.

It will thus be seen that four of the deaths were due to Zymotic Disease—viz., Whooping cough 2 and Infantile Diarrhœa 2, and that of other causes the most common were Tabes Mesenterica, Premature Birth, Convulsions, Teething, and Diseases of the respiratory organs.

The next table shows the distribution of births and deaths in each quarter:—

1893.	Births.	Birth Rate.	Deaths.	Death Rate.	Zymotic Death Rate.
1st Quarter.....	55	24·16	44	19·32	5·6
2nd „ .....	63	27·68	22	9·64	—
3rd „ .....	43	18·88	34	14·92	3·48
4th „ .....	60	26·36	41	18·0	0·4

This shows that, as usual, the second quarter was the most healthy of the four, not a single death from Zymotic disease being registered, and the general death-rate being only half that of the first and last. The high death-rates of

these two quarters were due chiefly to Measles and Influenza respectively.

Referring to the deaths at the various ætal periods, I find that 32·6 per cent. of those registered occurred in persons aged 65 and upwards, while 25·3 per cent. occurred in persons between 25 and 65, and 7·2 in persons between 5 and 25.

#### ZYMOTIC DISEASES.

Twenty deaths have been registered from the seven principal Zymotic diseases—viz., Diphtheria, 1; Typhoid Fever, 1; Measles, 9; Whooping Cough, 3; and Diarrhœa, 6. It will thus be seen that only two deaths occurred from these diseases, excluding Measles, Whooping Cough, and Diarrhœa, which, though properly included, are not yet very amenable to sanitary effort.

#### EPIDEMICS.

Only one disease was epidemic during the year, viz., Measles; and this was in reality not a new outbreak, but a continuation of the epidemic, the beginning of which I recorded in my last year's report.

Mention perhaps should be made of Influenza, although it is not yet officially recognised as an infectious disease. There was a comparatively mild outbreak in March, and a very much more serious one in November and December. I shall refer to this in more detail later on.

#### SMALLPOX.

Not a single case has occurred in the Borough during the year, although it has been epidemic all round the district, particularly in Birmingham, Walsall, and Aston Manor.



Considering the large amount of inter-communication which exists, it is a matter of surprise to me that an odd case at least has not been introduced.

#### SCARLET FEVER.

The Borough has again been remarkably free from Scarlet Fever, not a single death having been registered, and only 8 cases having been notified. These were all sporadic and occurred in different parts of the Borough. I could not in a single instance trace definitely the origin of the disease. Three of the cases were isolated in hospital.

#### MEASLES.

Nine deaths were registered from Measles, all in the first quarter of the year, and altogether 380 cases were notified. Of these 148 were under five years of age and 232 of five and upwards. All of these cases, with the exception of 12, occurred in the first and second quarters, and were a continuation of the epidemic which broke out in the last quarter of 1892. In accordance with the request of the Local Government Board, I made a report on the epidemic as a whole, which was as follows :—

[Copy.]

BOROUGH OF SUTTON COLDFIELD,  
MEDICAL OFFICER OF HEALTH'S OFFICE,  
14, TEMPLE STREET, BIRMINGHAM,

*June 7th, 1893.*

*To the Health and Highways Committee.*

MR. CHAIRMAN AND GENTLEMEN,

I beg to hand you a Report on the recent epidemic of Measles in the Borough, especially in relation to the request of the Local Government Board. In the third quarter of 1892 there were notified under the Act 5 cases, 3 in Maney Ward and 2 in Wyldc Green, while in the fourth quarter 253 cases were notified, chiefly in Maney and Trinity Wards. The disease broke out in epidemic form on the 21st of November, and 20 cases were reported up to the end of the month. In the following month (December) 232 cases were notified, while practically the same number, viz., 228 were

notified in January. The epidemic then declined rapidly, only 54 cases being notified in February, 64 in March, and 22 in April, while there has been no other case up to date. I have before stated that the disease first assumed an epidemic form in the centre of the town, chiefly in Maney Ward. In the early part of January it went to the northern part of the town or Hill Ward, while in March and April it again attacked Maney, and to some extent Boldmere and Trinity Wards. Altogether during the epidemic 620 cases were notified, and of this number only 9 deaths were registered, and all these occurred in the first quarter of 1893. Although the epidemic was very wide spread it was of a very mild type, the mortality only being 1·4 per cent. of the cases notified. It is very probable that some few cases were not reported, so that the mortality is even lower than the above figures shew. All the deaths were, with one exception, in children under five years of age, and of these eight, six were in children two years and under, so that we again see here the importance of shielding very young children from the infection of Measles as long as possible. I was unable, after patient and diligent investigation, to trace any new source of infection into the Borough, and I am of opinion, that, owing to the fact that we have had such a few cases during the last two years, there was a large amount of inflammable material, so to speak, when once the disease had made headway.

Energetic measures were adopted from the very beginning of the outbreak, and on the 5th of December I saw the Mayor and suggested to him that the schools in the centre of the town should be closed, and I may add the school authorities voluntarily accepted this suggestion, and the schools in question were shut up until the Christmas holidays. As the epidemic still showed no signs of abatement, I reported to the Health Committee in January that it would be undesirable for them to be opened at that time, and an order was consequently made for them to be closed until the 23rd of January. This was done, and the central schools re-opened on that day. In the meantime the disease had made its appearance in Hill Ward, and it became necessary to close the elementary schools in this neighbourhood, and these remained closed until the 13th of February. After the schools were closed, in each case they were thoroughly disinfected by the Inspector. Amongst the general precautions taken I may add that every house in which a case was notified was visited, and hand-bills were distributed suggesting precautions which it was desirable to take, and in the early stages of the epidemic an attempt was made to disinfect the premises. This, however, proved to be impossible with the staff at my disposal.

Although it cannot be said that notification appeared to have much influence in arresting the spread of the disease, I am of opinion that much good was done in the control that was exercised on patients by the visit of the Inspector, and that in this way exposure to chill was prevented in many cases, with the result that the mortality was diminished. In the two previous years since notification was established, I have found that the closing of the particular school affected has at once prevented the further spread of the disease; but in the late epidemic less good appears to have resulted. There can be no doubt, however, that there is no more valuable method of checking the spread of Measles, as a rule, than that of preventing the association of children which must of necessity take place at elementary schools.

I remain, Mr. Chairman and Gentlemen,

Your obedient servant,

A. BOSTOCK HILL, M.D., D.P.H. Camb.,

*Medical Officer of Health.*

The only further remark I need make is that although 253 cases occurred up to the end of 1892, all the mortality was observed in 1893, with the result that the Zymotic death-rate for this year appears unduly high, and also that at first sight the case mortality for the latter year appears to be higher than it actually was.

The 12 cases above referred to, occurred in December when the disease was introduced into one of the schools by a boy who had recently been to London for examination. Several other boys caught the disease from him, but to the end of the year there seemed no likelihood of its spreading to any serious extent.

#### WHOOPING COUGH.

Whooping Cough broke out in the Autumn in the central districts of the Town, and three deaths from it were registered. As cases of this disease are not notifiable, the registration of the deaths was the first intimation I had of its existence.

#### DIPHTHERIA.

Only one death from Diphtheria was registered and this took place in Maney Ward. The patient was two years old and had just recovered from an attack of Measles. The house lay low, and the privy which existed was defective and has since been replaced by a water closet. Tap water has also been laid on.

Seven other non-fatal cases have been notified, two of which came home into the Borough already infected, while three cases occurred in the same house as the fatal one above referred to.

The other two were both light cases and were not associated with any insanitary conditions.



## TYPHOID FEVER.

One death was registered from Typhoid Fever, and in addition one non-fatal case was notified; but in reality neither of them ought to be debited to the Borough. Both occurred at the same house, and the first one returned home ill from Stockport. He was nursed by his sister, who also came from a distance to attend to him and unhappily contracted the disease which ultimately proved fatal. I have before pointed out that Typhoid Fever is the best single index of the sanitary condition of a community, and as owing to meteorological conditions the year 1893 was one in which Typhoid was unduly prevalent, it is perhaps the most satisfactory feature in this report that not a single case occurred among the regular inhabitants of the Borough.

## DIARRHŒA.

Six deaths were registered from Diarrhœa, all in children under five years of age, and all in the autumn of the year. Whenever the ground temperature becomes exceedingly high, these conditions operate favourably to the outbreak of Infantile Diarrhœa. With the weather of last summer fresh in our memories, I need not say that the necessary requirements were fulfilled.

## INFLUENZA.

There was reason to hope that we should be free from any serious outbreak of epidemic Influenza in 1893, but unhappily this disease broke out in somewhat virulent form in November and December, and raised the death-rate for a few weeks to about double the average. Six deaths were registered as due directly to it, while the mortality from diseases of the respiratory organs increased to such an extent, that the deaths from them in the last quarter were nearly as many as in the other three quarters taken together. As in previous years the disease was



chiefly fatal to old people, children generally suffering very little. The total number of deaths from diseases of the respiratory organs was 33, while in 1892 it was 22.

#### SANITARY CONDITION AT THE END OF THE YEAR.

This, I think, still shows an improvement, the extension of the Sewerage system, the provision of a better water supply, and other matters, to which I shall refer later on, all tend to improve the Sanitary condition of the Borough, and at the end of December, with the exception of a few cases of Measles, and 1 of Scarlet Fever, the town was free from Infectious Disease.

#### AN ACCOUNT OF ENQUIRIES MADE AS TO CONDITIONS INJURIOUS TO HEALTH, AND OF THE PROCEEDINGS ADVISED; ALSO, AN ACCOUNT OF THE SUPERVISION EXERCISED OVER PLACES AND HOUSES WHICH THE SANITARY AUTHORITY HAVE POWER TO REGULATE, WITH THE ACTION TAKEN IN REGARD TO OFFENSIVE TRADES.

In every case where a nuisance has been reported or has been suspected, or where the existence of infectious disease has been notified, the premises have been visited at the earliest possible moment by the Inspector, and, wherever necessary, I have personally visited and advised on those conditions which required remedying.

The notification Act has again worked without a hitch, and has proved of the greatest value. Four hundred cases have been certified by Medical Practitioners, of which no less than 380 were of Measles; the other cases being Scarlet Fever, 8; Diphtheria, 8; Typhoid Fever, 2; and Erysipelas, 2. The cost of this notification was £50. I have referred in previous reports to the question of the notification of Measles, and have also again referred to the matter in dealing with that disease in the special report on page 10.

## ISOLATION.

Only three cases were sent to the Infectious Hospital, compared with 7 in the previous year and 61 in 1891, and these were suffering from Scarlet Fever. As a general principle it may be stated that it is desirable to isolate all infectious patients, but in a sparsely populated district, where many of the houses are large, it is practicable to isolate persons suffering from Scarlet Fever at home, and this was done in four cases with satisfactory results.

## DISINFECTION.

The Inspector reports that he disinfected thoroughly 18 houses in which infectious disease had occurred, while seven loads of bedding, etc., were sent to the disinfecting station.

## SCHOOLS.

Owing to the epidemic of Measles in the centre of the Town, the elementary schools were closed in January till the 23rd inst., while the extension of the disease to Hill Ward caused me to advise the closing of the schools there till the middle of February.

The interruption of educational work caused by the closing of a school is so serious a matter, that it should never be enforced unless absolutely necessary, but experience clearly proves that when the attendance is largely interfered with by the existence of infectious disease in the locality, time, money, and convenience are all saved by the proceeding.

## SEWAGE AND REFUSE DISPOSAL.

Mr. Marston has kindly forwarded to me the particulars of work carried on in the Borough in this department. I find that New Sewers have been constructed in the following Roads :—Boldmere, Jockey, Highbridge, Western, Station,

Eastern, Whiles, and Florence, the length laid reaching the very large total of 2 miles, 4 furlongs, and 111 yards. In addition to this, 64 houses have been connected with the Sewers, and 90 new Water Closets provided. In a letter accompanying the table Mr. Marston says :—

“The scheme for the drainage of the Boldmere district is now complete, and a considerable portion of this work has already been carried out, including the sewerage of Jockey Road, Boldmere Road, Highbridge Road, Western Road, Station Road and Eastern Road. By this means a very flat and imperfectly constructed length of sewer at Wylde Green has been dispensed with, and the district will no doubt be benefited considerably. The alterations included under the Ventilating and Flushing Scheme are now nearly completed, and the substantial reduction made recently in the charges for water for Sanitary purposes—the result of Parliamentary opposition last Session—will allow of the automatic flushing chambers being freely used, without entailing any great increase in the annual expenditure.”

In my last report I called your attention to the question of removal of ashpit refuse, and I desire again to say a few words on the subject. The growth of a town renders the removal of refuse increasingly difficult year by year, and consequently there is a tendency for accumulation of waste material in the neighbourhood of dwellings, when the removal has to be carried out by private effort. It is very desirable therefore that scavenging should be taken in hand by the governing body, either by its own staff or by means of a contractor, and I am strongly of opinion that the time has now arrived, when this scavenging has become the most pressing sanitary question. In all populous districts our liquid refuse or sewage is taken rapidly away by an efficient system of sewers, and this is the more reason therefore why the work should be completed by an equally efficient removal of household dust.

#### WATER SUPPLY.

I have analysed during the year 15 samples of water : 12 from the mains of the South Staffordshire Water Works



Co., and three from private wells. These three latter all shewed evidence of pollution with organic matter of animal origin. No complaints have been made this year of the quality of the tap water.

I notice of late that the quantity of dissolved mineral matter in the water has considerably increased. The sample taken on September 30th, contained 29 parts per 100,000 of dissolved mineral matter, while the soluble chlorides were also above the average. In the first half of 1892 the water contained about 13 parts per 100,000 of solid matter, or about half of that found in 1893. It is to be hoped that this increased quantity of mineral matter will not be maintained, for not only for potable purposes from a medical point of view is it undesirable, but it is also inferior for many other domestic purposes.

#### OVERCROWDING.

Only two cases of overcrowding came to the knowledge of the Sanitary Inspector: one at Whitehouse Common, the other on Reddicap Hill. In both instances, the nuisance was abated on service of notice without recourse to legal proceedings.

#### SLAUGHTER-HOUSES.

No new slaughter-houses have been licensed during the year, and those already existing have been carried on satisfactorily, and no complaints have been made in regard to them. I would call attention to the great importance to be attached to the licensing of new premises. Every slaughter-house is liable to cause dangerous nuisance, and no plan should be passed without serious consideration being given not only to the proposed site, but to the structure of the building and its appliances.



## DAIRIES AND COWSHEDS.

The Inspector reports that he has inspected 61 cowsheds and dairies in the Borough, and has found them, with few exceptions, in good condition. In 10 cases he has given orders for lime washing, but has issued no formal notices.

## ADULTERATION OF FOOD.

The Inspector has submitted to me, as County Analyst, 70 samples of food, and of these four proved on analysis to be adulterated, viz., two samples of milk, one of rum, and one of mustard. Full particulars are given in tabular form in the Appendix. The percentage of adulterated articles is 5·3. In the years, 1890, 91, and 92, it was respectively 5·4, 4·6, and 3·0, while for the whole County it is 12 per cent.

## NEW BUILDINGS.

Mr. Marston, the Borough Surveyor, reports that 90 plans for new houses were passed, compared with 58 in 1892, and that 19 plans for alterations and additions have also been passed. Four plans for new shops were submitted and proved to be satisfactory, while three new roads have been constructed. This is very important evidence of growth and prosperity in a year when trade and agriculture have suffered from considerable depression.

## METEOROLOGY.

Mr. Marston has supplied me with the meteorological readings taken daily by him in Sutton, and as the instruments in use are of the best and fixed in a scientific manner, the figures are of great value. These will be found in tabular form in the Appendix. The following facts and comparisons are worthy of notice.

The rainfall for the year (18·06 in.) has been remarkably small; 8·5 inches less than the average of the four years during which the records have been kept, and 5 inches less than the smallest amount recorded in any one of those years (1890—23·142 in.)

The duration of sunshine was remarkable (1525 hours 28 min.), which was 346 hours 26 min., or nearly an hour a day, more than the average for the past four years, and 221 hours 16 min. more than the highest recorded in 1891. The relative humidity was 5 per cent. less than the 4 years average, and 3 per cent. less than in the driest years, 1891-2; while the mean temperature (the average of the mean of the months) was 49·7, or 2·5 higher than the 4 years' average, and 1·4 higher than in any of those years, the highest being 48·3 in 1889. The figures shewing the percentage of humidity of the atmosphere for the past 5 years are interesting and instructive (87, 84·9, 82, 82, 79), shewing a remarkable increase annually in the dryness of the air.

#### GENERAL SANITARY WORK.

The report of the Inspector of Nuisances appears in the Appendix in tabular form, and evidences the fact that the duties of his office have been carried out in the same efficient way as heretofore.

#### CONCLUSION.

I can again congratulate you on the satisfactory nature of this report, which adds another record to those already existing, of the general healthiness of Sutton Coldfield. I can also, confidently look forward to this state of things being maintained, if the same enlightened and vigorous policy of Sanitary administration be continued. I cannot

close without bearing testimony to the courteous consideration which my advice has at all times received at your hands, while the conduct of all official work has been rendered both easy and pleasant by the help, always willingly rendered, of my brother officers and the medical practitioners of the town.

I have the honour to remain,

Mr. Chairman and Gentlemen,

Your obedient servant,

A. BOSTOCK HILL, M.D., D.P.H., Camb.,

*Medical Officer of Health.*



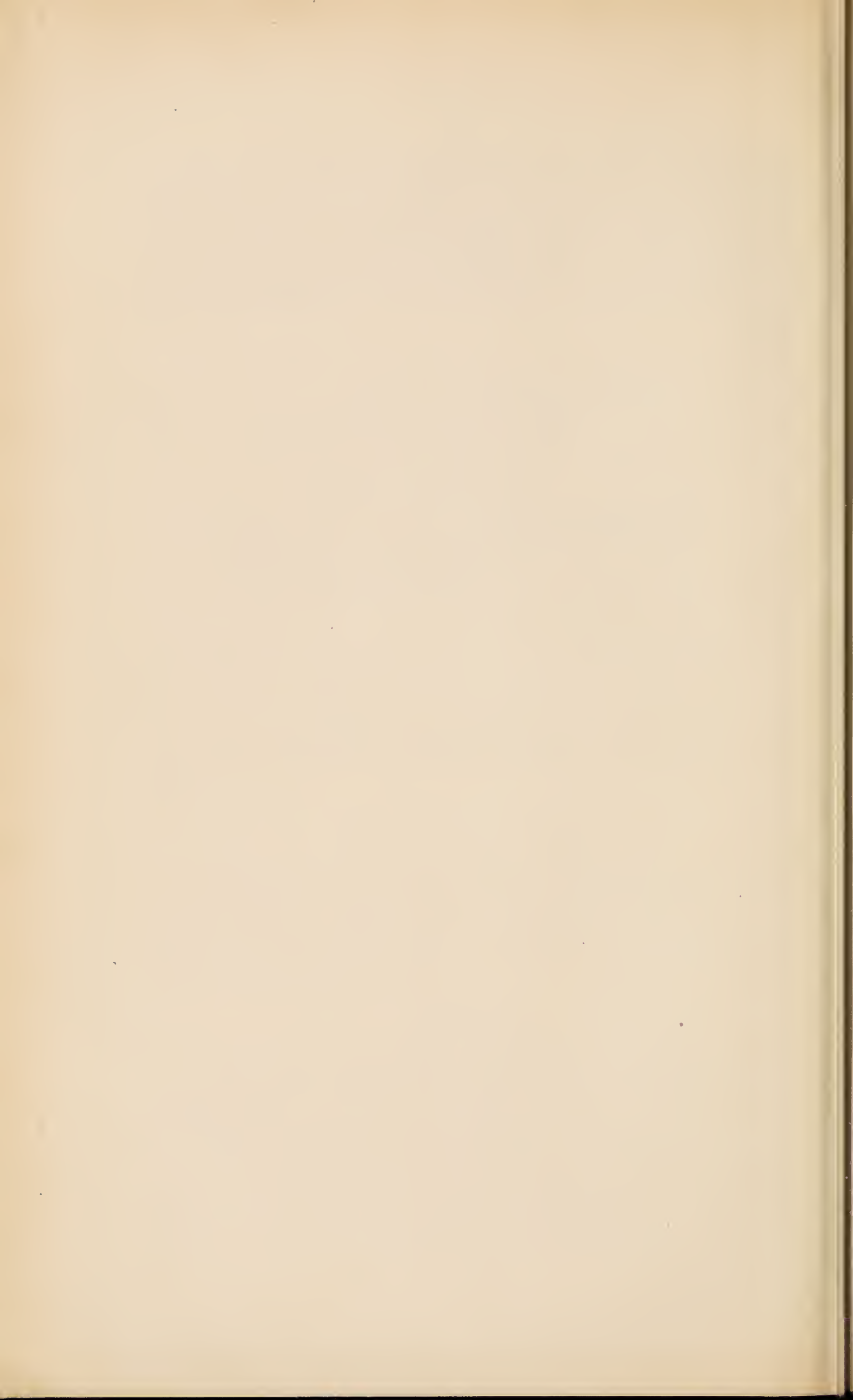










TABLE B.—TABLE OF POPULATION, BIRTHS, AND OF NEW CASES OF INFECTIOUS SICKNESS, COMING TO THE KNOWLEDGE OF THE MEDICAL OFFICER OF HEALTH, DURING THE YEAR 1893, IN THE URBAN SANITARY DISTRICT OF SUTTON COLDFIELD, CLASSIFIED ACCORDING TO DISEASES, AGES, AND LOCALITIES.

NAMES OF LOCALITIES adopted for the purpose of these Statistics: Public Institu- tions being shown as separ- ate localities.	POPULATION AT ALL AGES.		Registered Births.	Aged under 5 or over 5.	NEW CASES OF SICKNESS IN EACH LOCALITY, COMING TO THE KNOWLEDGE OF THE MEDICAL OFFICER OF HEALTH.													NUMBER OF SUCH CASES REMOVED FROM THEIR HOMES IN THE SEVERAL LOCALITIES FOR TREATMENT IN ISOLATION HOSPITAL												
	Census, 1891.	Estimated to middle of 1893.			Smallpox.	Scarletina.	Diphtheria.	Membranous Croup.	FEVERS.					Cholera.	Erysipelas.	Measles.		Smallpox.	Scarletina.	Diphtheria.	Membranous Croup.	FEVERS.					Cholera.	Erysipelas.	Measles.	
									Typhus	Enteric or Typhoid.	Continued	Relapsing.	Puerperal									Typhus	Enteric or Typhoid.	Continued	Relapsing.	Puerperal				
(a)	(b)	(c)	(d)	(e)	1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5	6	7	8	9	10	11	12	13
BOLDMERE WARD...	1463	1542	28	Under 5 5 upwds.	...	...	...	...	...	...	...	...	...	...	...	20 25	...	...	...	...	...	...	...	...	...	...	...	...	...	...
HILL WARD ...	1471	1506	44	Under 5 5 upwds	...	...	...	...	...	...	...	...	...	...	...	64 98	...	...	1	...	...	...	...	...	...	...	...	...	...	...
MANEY WARD ...	1916	2089	60	Under 5 5 upwds.	...	...	2 3	...	...	...	...	...	...	...	...	32 44	...	...	...	...	...	...	...	...	...	...	...	...	...	...
TRINITY WARD ...	1548	1648	36	Under 5 5 upwds.	...	...	...	...	...	...	...	...	...	...	...	27 57	...	...	...	...	...	...	...	...	...	...	...	...	...	...
WALMLEY WARD ...	1031	1037	30	Under 5 5 upwds.	...	...	...	...	...	...	...	...	...	...	...	3 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...
WYLDE GREEN WARD ...	1257	1278	23	Under 5 5 upwds	...	...	...	...	...	...	...	...	...	...	...	2 3	...	...	...	...	...	...	...	...	...	...	...	...	...	...
PRINCESS ALICE ORPHANAGE }	...	...	...	Under 5 5 upwds.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTALS ...	8686	9100	221	Under 5 5 upwds.	...	...	2 6	...	...	...	...	...	...	...	...	148 232	...	...	...	...	...	...	...	...	...	...	...	...	...	...

State here whether "Notification of Infectious Disease" is compulsory in the District. Yes. Since when? January, 1890. Besides the above-mentioned Diseases, insert in the columns with blank headings the names of any that are notifiable in the District, and fill the columns accordingly. State here the name of the Isolation Hospital used by the sick of the District. Mark (H) the Locality in which such Hospital is situated: and if not within the District, state where it is situated. Aston Manor Joint Hospital, in West Bromwich Rural District.

7LEDGE OF THE MEDICAL OFFICER OF HEALTH,  
NG TO DISEASES, AGES, AND LOCALITIES.

ER OF SUCH CASES REMOVED FROM THEIR HOMES IN THE SEVERAL LOCALITIES FOR TREATMENT IN ISOLATION HOSPITAL.

[illegible]

s, insert in the columns with blank headings the names of any that are  
uch Hospital is situated ; and if not within the District, state where it is





TABLE C.—WATER: RESULT OF ANALYSES

No. of Water.	LOCALITY.				Date.	Total Solid Matter.	Ammonia Free.
SOUTH STAFFORDSHIRE WATER- WORKS WATER.							
1	Wylde Green	...	...	...	Jan. 31st	19·0	0·001
2	New Oscott	..	...	...	Mar. 1st.	16·0	0·000
3	Walmley	...	...	...	„ 29th	20·0	0·001
4	Holland Street	...	...	...	April 25th	23·0	0·001
5	Walmley	...	...	...	May 26th	25·0	0·001
6	Wylde Green	...	...	...	July 3rd	22·0	0·000
7	Mill Street	...	...	...	Sept. 7th	20·0	0·001
8	Wylde Green	...	...	...	„ 30th	29·0	0·001
9	Boldmere	..	...	...	Nov. 1st	24·0	0·003
10	Mill Street	...	...	...	„ 13th	24·0	0·000
11	Duke Street	...	...	...	Dec. 1st	24·0	0·002
12	Boldmere	...	...	...	„ 29th	24·0	0·002
WELL WATERS.							
1	Duke Street	...	...	...	Mar. 4th	56·0	0·003
2	Lower Parade	...	...	...	April 26th	100·0	0·044
3	Walmley	...	...	...	May 11th	72·0	0·002

## COLDFIELD.

23

EXPRESSED IN PARTS PER 1,000.

Ammonia Organic.	Nitrogen as Nitrates and Nitrites.	Chlorine.	REMARKS.
0.003	trace	1.7	
0.002	trace	1.7	
0.002	trace	1.6	
0.003	trace	1.7	
0.002	0.22	1.6	
0.001	0.22	1.5	
0.001	0.165	1.7	
0.003	0.44	2.0	
0.006	0.165	1.6	
0.001	0.275	1.5	
0.003	0.44	1.5	
0.002	0.22	1.4	
0.006	1.87	4.5	Complaint made to Inspector.
0.012	1.87	11.1	Diphtheria occurred here.
0.013	1.76	5.6	Complaint made to Inspector.

TABLE D.

SUMMARY OF SANITARY WORK DONE IN THE INSPECTOR  
OF NUISANCES' DEPARTMENT DURING THE YEAR 1893.

DESCRIPTION OF WORK PERFORMED.				Inspections and Observations made.	Formal Notices by Authority.	Nuisances Abated after Notice.
Dwelling Houses and Schools.	{	Foul Conditions ... ..	...	4	2	2
		Structural Defects ... ..	...	6	3	3
		Overcrowding... ..	...	4	2	2
		Unfit for Habitation ... ..	...	...	...	...
		Lodging Houses ... ..	...	...	...	...
		Dairies and Milkshops ... ..	...	24	...	...
		Cow Sheds ... ..	...	26	...	...
		Bakehouses ... ..	...	19	...	...
		Slaughter-houses ... ..	...	31	...	...
		Canal Boats ... ..	...	...	...	...
House Drainage	{	Ashpits and Privies ... ..	...	90	24	24
		Deposits of Refuse and Manure		12	6	6
		Water-Closets ... ..	...	18	9	9
	{	Defective Traps .. ..	...	20	10	10
		No Disconnection ... ..	...	4	2	2
		Other Faults ... ..	...	25	12	12
		Water Supply ... ..	...	8	3	3
		Pigsties ... ..	...	12	6	6
		Animals improperly kept ... ..	...	18	9	9
		Offensive Trades ... ..	...	...	...	...
		Smoke Nuisances ... ..	...	...	...	...
		Other Nuisances ... ..	...	6	3	3
		Totals ... ..	...	327	91	91





## TABLE E.

PROCEEDINGS TAKEN UNDER THE SALE OF FOOD AND DRUGS  
 ACTS, 1875-9. DESCRIPTION OF SAMPLES TAKEN FOR  
 ANALYSIS DURING THE YEAR.

NO.	DATE.	ARTICLES.	REMARKS.
1—Jan.	12th .....	Milk .....	Genuine.
2— „	12th .....	Milk .....	Adulterated with 20% of added water, cautioned by Committee.
3— „	12th .....	Milk .....	Genuine.
4— „	12th .....	Milk .....	Genuine.
5— „	12th .....	Coffee .....	Genuine.
6— „	12th .....	Mustard .....	Genuine.
7— „	12th .....	Pepper .....	Genuine.
8— „	12th .....	Tea .....	Genuine.
9—Feb.	9th .....	Milk .....	Genuine.
10— „	9th .....	Milk .....	Genuine.
11— „	9th .....	Milk .....	Genuine.
12— „	9th .....	Milk .....	Genuine.
13— „	9th .....	Tartaric Acid .....	Genuine.
14— „	9th .....	Arrowroot .....	Genuine.
15— „	9th .....	Bicarbonate of Soda	Genuine.
16— „	9th .....	Linseed Meal .....	Genuine.
17—Mar.	13th .....	Milk .....	Genuine.
18— „	13th .....	Milk .....	Genuine.
19— „	13th .....	Milk .....	Genuine.
20— „	13th .....	Milk .....	Genuine.
21— „	13th .....	Whiskey .....	Genuine.
22— „	13th .....	Rum .....	Adulterated 31 degrees under proof instead of 25, cautioned by Committee.
23— „	13th .....	Gin .....	Genuine.
24— „	13th .....	Gin .....	Genuine.
25—April	13th .....	Milk .....	Genuine.
26— „	13th .....	Milk .....	Genuine.
27— „	13th .....	Milk .....	Genuine.
28— „	13th .....	Milk .....	Genuine.
29—May	18th .....	Milk .....	Genuine.
30— „	18th .....	Milk .....	Genuine.
31— „	18th .....	Butter .....	Genuine.
32— „	18th .....	Butter .....	Genuine.

TABLE E—CONTINUED.

NO.	DATE.	ARTICLES.	REMARKS.
33—June	15th .....	Milk .....	Genuine.
34— ..	15th .....	Milk .....	Adulterated 20% deficient in fat, cautioned by Committee.
35— „	15th .....	Milk .....	Genuine.
36— „	15th .....	Coffee .. .....	Genuine.
37— „	15th .....	Tea .....	Genuine.
38—July	8th .....	Whiskey .....	Genuine.
39— „	8th .....	Whiskey .....	Genuine.
40— „	8th .....	Whiskey .....	Genuine.
41— „	8th .....	Whiskey .....	Genuine.
42—Aug.	17th .....	Milk .....	Genuine.
43— „	17th .....	Milk .....	Genuine.
44— „	17th .....	Milk .....	Genuine.
45— „	17th .....	Coffee .....	Genuine.
46— „	17th .....	Mustard .....	Genuine.
47— „	17th .....	Pepper .....	Genuine.
48—Sept.	18th .....	Milk .....	Genuine.
49— „	18th .....	Milk .....	Genuine.
50— „	18th .....	Milk .....	Genuine.
51— „	18th .....	Coffee .....	Genuine.
52— „	18th .....	Pepper .....	Genuine.
53— „	18th .....	Mustard .....	Adulterated with 10% of Tumeric and Starch, cautioned by Committee.
54—Oct.	16th .....	Milk .....	Genuine.
55— „	16th .....	Milk .....	Genuine.
56— „	16th .....	Milk .....	Genuine.
57— „	16th .....	Rum .....	Genuine.
58— „	16th .....	Gin .....	Genuine.
59—Nov.	13th .....	Milk .....	Genuine.
60— „	13th .....	Milk .....	Genuine.
61— „	13th .....	Milk .....	Genuine.
62— „	13th .....	Butter .....	Genuine.
63— „	13th .....	Butter .....	Genuine.
64— „	13th .....	Butter .....	Genuine.
65—Dec.	15th .....	Milk .....	Genuine.
66— „	15th .....	Milk .....	Genuine.
67— „	15th .....	Milk .....	Genuine.
68— „	15th .....	Tea .....	Genuine.
69— „	15th .....	Cocoa .....	Genuine.
70— „	15th .....	Cocoa .....	Genuine.

TABLE F.

Return, shewing the number of Births Registered, together with the number of such cases successfully Vaccinated or otherwise disposed of in the Borough of Sutton Coldfield during the year ending 31st December, 1893.

Sub-Registration District.	No. of Births Registered during the year ending 31st Dec., 1893.	No. of these cases successfully Vaccinated.	Insusceptible of Vaccination.	Died before Vaccination.	Cases under Postponement.	Removals to other Districts out of the Union.	No. of cases not to be found.	No. of cases remaining Unvaccinated at date of this Return.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Sutton Coldfield ...	221	158	1	17	11	2	2	30

NOTE.—As the Public Vaccination for Sutton Coldfield is performed only in January, April, July, and October, in each year, 23 of the cases in column 9 had not attained the age for Vaccination at the time appointed in January, 1894.

Aston Union Offices, Vauxhall,  
January, 1894.

Vaccination Officer.



TABLE G.

STREETS IN THE BOROUGH OF SUTTON COLDFIELD IN WHICH  
CASES OF INFECTIOUS DISEASES OCCURRED.

WARD AND STREET.	Measles.	Scarlatina.	Diphtheria.	Enteric or Typhoid Fever.	Erysipelas.
<b>BOLDMERE—</b>					
Clifton Road ... ..	...	1	...	..	..
Court Lane ... ..	3	...	...	..	..
Chester Road ... ..	8	...	...	..	..
Boldmere Road ... ..	22	...	...	..	..
Church Road ... ..	4	...	...	..	..
Highbridge Road ... ..	4	...	...	..	..
New Oscott ... ..	4	...	...	..	..
<b>HILL—</b>					
Hill Village ... ..	39	...	...	...	...
Buck Lane ... ..	6	...	...	...	...
Littlehay ... ..	1	...	...	...	...
Sutton Lane ... ..	1	...	...	...	...
Four Oaks ... ..	18	...	...	...	...
Roughley ... ..	12	...	...	...	...
Little Sutton ... ..	17	...	...	...	...
Mere Green ... ..	6	...	...	...	...
Church Terrace ... ..	7	1	...	...	...
Hill Hook ... ..	20	...	...	...	...
Long Lane ... ..	2	...	...	...	...
Ley Hill ... ..	3	...	...	...	...
Four Oaks Common ... ..	9	...	...	...	...
Whitehouse Common... ..	3	...	...	...	...
Bellwell Lane ... ..	1	...	...	...	...
Blake Street ... ..	7	...	...	...	...
Slade Lane ... ..	5	...	...	...	...
Hill Wood ... ..	5	...	...	...	..
<b>MANEY—</b>					
Lichfield Road... ..	13	...	...	...	...
Queen Street ... ..	12	...	...	...	...
Duke Street ... ..	13	...	1	2	...
Farthing Lane... ..	2	...	...	...	...

TABLE G—Continued.

WARD AND STREET.	Measles.	Scarlatina.	Diphtheria.	Enteric or Typhoid Fever.	Erysipelas.
<b>MANEY—Continued—</b>					
Holland Street ...	7	1	...	...	...
Lower Parade ...	5	...	4	...	...
Victoria Road ...	1	...	...	...	...
Newhall Street ...	1	...	...	...	...
Avenue Road ...	3	...	...	...	...
Manor Road ...	4	...	...	...	...
Holland Road ...	1	...	...	...	...
Reddicap Hill ...	13	...	...	...	...
Clifton Road ...	1	1	...	...	...
<b>TRINITY—</b>					
High Street ...	22	...	...	...	...
Rectory Road ...	5	...	1	...	...
Motterams Lane ...	1	...	...	...	...
Doe Bank ...	2	1	...	...	...
Station Road ...	8	1	...	...	...
Coleshill Street ...	13	...	...	...	...
Reddicap Hill ...	5	...	...	...	...
Park Road ...	5	...	...	...	...
Mill Street ...	14	...	...	...	...
The Parade ...	6	...	...	...	...
Clifton Street ...	1	...	...	...	...
Boswell Road ..	1	...	...	...	...
Anchorage Road ...	1	...	1	...	...
<b>WALMLEY—</b>					
Whitehouse Common...	5	2	...	...	...
Walmley Ash ...	...	...	1	...	...
Penns Lane ...	3	...	...	...	...
<b>WYLDE GREEN—</b>					
Lichfield Road...	5	...	...	...	1
Vesey Road ...	...	...	...	...	1

TABLE H.—RESULT OF METEOROLOGICAL OBSERVATIONS TAKEN AT SUTTON COLDFIELD DURING THE YEAR 1893.

DATE	TOTALS.			EXTREMES.														MEANS.			DATE.
	Rainfall.	Sunshine.		BAROMETER.				THERMOMETERS.								RAIN GAUGE, 360·7 feet above mean sea level.		BARO- METER.	(in shade)	Relative Humidity.	
				Highest Corrected Readings.	Lowest Corrected Readings.	(in shade)				Highest Readings in Sun.	Lowest Readings on Grass.	Greatest Daily Rainfall (including Snow).	Pressure of air, Readings corrected and reduced to 32° Fahr. at mean sea level.	Mean Temperature for the Month.							
						Highest Readings.	Lowest Readings.	Highest Readings in Sun.	Lowest Readings on Grass.												
	ins.	hrs.	min.	ins.	Date.	ins.	Date.	°	Date.	°	Date.	°	Date.	°	Date.	ins.	Date.	ins.	°	%	
January .....	1·623	36	00	30·430	5th	29·352	29th	52·0	31st	16·0	3rd, 4th	79·2	31st	10·2	2nd	·420	26th	30·069	35·6	90	January
February ...	2·901	44	35	30·370	5th	28·755	21st	58·0	19th	26·2	5th	91·0	18th	15·0	5th	·497	25th	29·691	39·9	88	February
March .....	·590	186	40	30·431	20th	29·476	1st	65·0	25th	21·9	18th	102·0	25, 27th	14·5	18th	·230	2nd	30·110	43·6	79	March
April .....	·090	243	30	30·567	8th	29·903	19th	77·0	20th	27·1	13th	117·6	21st	19·2	13th	·080	1st	30·197	51·0	76	April
May .....	1·738	188	43	30·435	7th	29·550	19th	75·2	5th	36·0	30th	123·4	15th	23·0	10th	·713	17th	30·061	53·9	70	May
June .....	·976	177	45	30·387	10th	29·340	23rd	85·1	17th	39·2	25th	122·6	18th	27·7	25th	·305	22nd	30·033	59·7	70	June
July .....	1·637	138	40	30·287	28th	29·502	20th	82·9	7th	47·1	22nd	125·5	2nd	40·2	22nd	·465	11th	29·898	62·1	67	July
August .....	1·470	205	00	30·339	29th	29·521	21st	87·9	18th	43·8	28th	129·5	18th	31·8	28th	·400	4th	30·017	64·7	72	August
September ...	·661	140	50	30·370	12th	29·246	29th	73·9	6th	34·2	20th	129·2	5th	24·0	20th	·280	8th	29·860	54·9	79	September
October .....	2·164	98	10	30·392	20th	29·104	4th	67·4	6th	25·1	31st	120·1	16th	17·1	31st	·340	17th	29·882	49·9	81	October
November ...	1·484	35	15	30·514	21st	29·021	17th	57·6	3rd	23·1	4th	97·8	12th	14·2	4th	·350	25th	30·001	40·9	87	November
December ...	2·726	30	20	30·759	30th	28·755	20th	52·3	13th	20·0	2nd	87·0	27th	10·2	1st	·645	12th	29·953	39·9	93	December
	ins. 18·060	hrs. 1525	min. 28	Means for the year.														29·981	49·7	79	

The greatest amount of rain any one month was 2·901 inches during February ; and the greatest amount during any one day was ·731 on May 17th.

Excessive rain also fell on the following days :—February 25th, ·497 ; and December 12th, ·645.

The highest corrected reading of the Barometer was 30·759 on December 30th ; and the lowest was 28·755 on February 21st and December 20th.

The highest reading of Thermometer in shade was 87·9 on August 18th ; and the lowest was 16·0 on January 3rd and 4th.

The highest reading of the Solar Radiation Thermometer was 129·5 on August 18th ; and the lowest readings of the Terrestrial Radiation Thermometer were 10·2 on January 2nd, and December 1st.

C. F. MARSTON, ASSOC. M. INST. C E., *Borough Surveyor.*







